WHAT IS CLAIMED IS:

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1. An computer apparatus capable of assisting a user in decision-making in respect of a selected domain, comprising:

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(a) one or more input interfaces capable of receiving input data representing current information about conditions in a domain;

(b) one or more memories for storing a plurality of items of data about said domain and also items of data from a database representing information about the domain and information external to the domain;

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[] [= (c) a decision processor capable of generating output data representing a choice, in accordance with its programmed algorithms, axioms and rules, based on data from said memory and from said input interface(s);

(d) a storage device for storing an operator system algorithm and data;

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(e)

one or more user interfaces that enable a user to interact with said decision processor; wherein said user interface may comprise a said input interface;

a computer programmed to compute said operator system algorithm;

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(g) a connection bus capable of effecting connections among the input interface; the memorie(s), the decision processor(s) and user interface(s); wherein said user interface permits a user to select selectable data and a selectable operator system algorithm, one or more selectable domains, selectable axioms and selectable rules; and wherein said decision processor is capable of generating output data based on said selections made.

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- 2. The apparatus as in claim 1 further comprising:
- (a) an operator system algorithm;
- (b) said operator system algorithm with recursive capability;
- (c) said operator system algorithm with feedback capability;
- (d) said operator system algorithm with capacity to self-modify its operators;
 - (e) said operator system with capacity to follow a set of rules;
 - (f) a set of axioms particular to an area of application of said algorithm;
 - (g) a set of rules particular to a user.
- 10 3. The apparatus as in claim 2 further comprising:
 - (a) mapped patent information;
 - (b) mapped technology literature information;
 - (c) a built technology landscape;
 - (d) a built competitive rights landscape;
 - (e) multiple search results;
 - (f) cross-tabulations of frequencies;
 - (g) inferences from general intellectual asset strategy.
 - 4. The apparatus as in claim 2 further domprising:
 - (a) an identify/select-raw-data operator which can select patents;
 - (b) a define-terms operator; wherein said operator is applied to output from said identify/select-raw-data operator;
 - (c) an interrelate-selected-data operator; wherein said operator is applied to output from said define-terms operator;
 - (d) a score-cells operator; wherein said operator is applied to the output from said interrelate-selected-data operator;
 - (e) an analyze/score-company-positions operator; wherein said operator is applied to the output of the score-cells operator.

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- 5. The apparatus as in claim 4 further comprising:
- (a) an analyze-results-in-terms-of potential-actions operator, wherein said operator is applied to the output of an analyze/score-company-positions operator.

6. The apparatus as in claim 5 further comprising:

(a) an evaluate-other-considerations-operator; wherein said operator is applied to the output of an analyze-results-in-terms-of potential-actions operator.

7. The apparatus as in claim 6 further comprising:

(a) a first feedback operator; wherein said first operator is applied to the output of the interrelate-selected-data operator to adjust search terms to be narrower or broader in selecting raw data.

8. The apparatus as in claim 7 further comprising:

- (a) a second feedback operator; wherein said second operator is applied to the output of both the evaluate-other considerations operator and the evaluate-other-considerations operator so as to refine results-and-investigate-alternative-actions.
- 9. The apparatus as in claim 9 further comprising:
- (a) a first set of defined search terms for searching patent text technical literature;
- (b) patents and technical articles identified by identification number and year of issue, for patents, and year of publication for technical articles; wherein said patents and technical articles found which contained text with defined search terms;
- (c) a second set of defined search terms; wherein said terms are applied to text of patents and technical articles already identified by first set of search terms so as to form a two-dimensional matrix;

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- (d) various sub-scores and scores and sub-indices and indices calculated from content of said matrix;
- (e) at least two assignees with at least one of said scores or indices; wherein said scores of each assignee can be compared.
- 10. The apparatus as in claim 9\further comprising:
- (a) hits defined as the number of cells in which a patent appears;
- (b) weighted hits defined as the sum, over the cells, of the quantity: the number of patents in a cell times the weight assigned to that cell;
- (c) weighted action defined as the sum, over a search term axis, of the number of search terms rows, or columns, in which a patent appears, where the number of patents appearing in said row, or said column, has been multiplied by a weighting factor for that search term row, or column.
- 11. The apparatus as in claim 10 further comprising:
- (a) dominance defined as a measure of the percentage of patents, overall, and in recent years assigned to the top 10% of assignees;
- (b) recent dominance defined as a measure of the percentage of recent patents, in the last two years, assigned to the top 10% of assignees;
- (c) innovation is defined as a measure of recent patent activity for issued and applied patents in a cell;
- (d) issued innovation factor is a measure of recent patent activity for issued patents in a cell;
- (e) applied innovation factor is a measure of recent patent activity for applied patents in a cell;
- (f) predictive innovation is the difference between applied and issued innovation;
- (g) predictive innovation factor -1 is defined as: Innovation Factor 1 = (A / ([B + C] / 2))
- 30 (h) predictive innovation factor -4 is defined as: Innov. Fct. $4 = (1/21)\{6(A-B)/B + 5(B-C)/C + 4(C-D)/D + 3(D-E)/E + 2(E-F)/F + 1(F-G)/G$.

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12. The apparatus as in claim 11 further comprising: Sur average dominance (AvDom) defined as AvDom = ½ (dominance (a) quartile + recent dominance quartile); average innovation (AvInn) defined as AvInn = ½ (issued innovation (b) quartile + applied innovation quartile); 5 (c) PredInn is defined as a predictive innovation quartile, for a calculated predictive innovation. 13. The apparatus as in clarm 12 further comprising: cell selection index (SI) defined as: CSI = (AvDom)•(Av 10 (a) Inn) • (PredInn); assignee composite score(ACS) defined as: ACS = H1 •CSI (b) where the H1 factor is multiplied by the Cell Selection Index, CSI, and where: H1 = (hits in field/patents in field) • patents in cell + 15 (recent hits in field/recent patents in field) • recent patents in cell. The apparatus as in claim 13 further comprising: assignee field index (AFI) defined as: AFI = H• PerCentAHP • Aver., 20 where: H = ½ [(An Assignee's Hits / An Assignee's Patents) + (An Assignee's Recent Hits / An Assigner's Recent Patents)], Where: PerCentAHP = Percentage of Cells where the Assignee Holds at least one Patent = (Number of Cells where an Assignee Holds at least one Patent) / 25 (Total Number of Cells in the Technology Field), And where: Aver. = Average (ACI x CSI) across the Technology Field = (Sum of each (ACI for the given Assignee in each cell in the Technology Field x CSI of the respective dell)) / (Total Number of Cells in the Technology Field); 30



standardized assignee field index(sAFI) defined as: sAFI =AFI •
Standardizing Factor
where: Standardizing Factor = 100 / Max(AFI).

15. The apparatus as in claim 14 further comprising:

assignee cell index (ACI) defined as: ACI = ½{AvPCPinCell +AvPCRPinCell} • [(ACIsI + 100) + (ACAppI + 100)]/ 200 • 1000, where:

AvPCPinCell = Percentage of Patents in a Cell held by an Assignee, AvPCRPinCell = Percentage of Recent Patents in a Cell held by an Assignee),

and where:

Percentage of Patents in a Cell held by an Assignee = (An Assignee's Patents in a Cell / Total Patents in a Cell),

Percentage of Recent Patents in a Cell held by an Assignee = (An Assignee's Recent Patents in a Cell / Total Recent Patents in a Cell), and where:

ACIsI = Assignee Cell Issued Innovation, ACAppI = Assignee Cell Applied Innovation,

where:

Assignee Cell Issued Innovation = ACIsI = (1/21){ [A-B]/B • 6 + [B-C]/C • 5 + [C-D]/D • 4 + [D-E]/E • 3 + [E-F]/F • 2 + [F-G]/G • 1} where:

A = the number of patents issued within one year of the last patent issued in the data set; B = the number of patents issued more than one year but less than two years prior to the issuing of last patent in the data set; C = the number of patents issued more than two years but less than three years prior to the issuing of last patent in the data set; D = the number of patents issued more than three years but less than four years prior to the issuing of last patent in the data set; E = the number of patents issued more than four years but less than five years prior to the issuing of last patent in the data

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set; F = the number of patents issued more than five years but less than six years prior to the issuing of last patent in the data set; G = the number of patents issued more than six years but less than seven years prior to the issuing of last patent in the data set;

where:

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Assignee Cell Applied Innovation = ACAppI = (1/21){ [A-B]/B • 6 + [B-C]/C • 5 + [C-D]/D • 4 + [D-E]/E • 3 + [E-F]/F • 2 + [F-G]/G • 1}, where:

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A = the number of patents applied within one year of the last patent issued in the data set; B = the number of patents applied more than one year but less than two years prior to the issuing of last patent in the data issuing set; C = the number of patents applied more than two years but less than three years prior to the issuing of last patent in the data set; D = the number of patents issued applied more than three years but less than four years prior to the issuing of last patent in the data set; E = the number of patents applied more than four years but less than five years prior to the issuing of last patent in the data set; F = the number of patents applied more than five years but less than six years prior to the issuing of last patent in the data set; F = the number of patents applied more than six years but less than seven years prior to the issuing of last patent in the data set;

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(b) standardized assignee cell index (sACI) defined as:

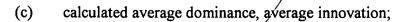
sACI = ACI • Standardizing Factor

where:

Standardizing Factor = 100 / Max (ACI).

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- 16. The apparatus as in claim 15 further comprising:
- (a) calculated hits, weighted hits, weighted action;
- (b) calculated investment, dominance, recent dominance, issued innovation factor, applied innovation factor, predictive innovation factor -1, innovation factor-4;



- (d) calculated cell selection index, assignee composite score;
- (e) calculated assignee field index, standardized assignee field index;
- (f) calculated assignee cell/index and standardized assignee cell index;
- (g) at least one of said scores or indices for comparison of different assignees.

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17. The apparatus as in claims 11, or 12 or 13 or 14 or 15 further comprising:

- (a) a cluster wherein said cluster is a group of cells are related by having one or more of same patents appearing in each of said cluster's cells;
- (b) a required level of said one or more number of patents in said cluster's cells, in order to define said cluster, is specifiable by a user;
- a cluster may be determined by the arbitrary designation of cells by a user of said designated cells as belonging to a cluster.

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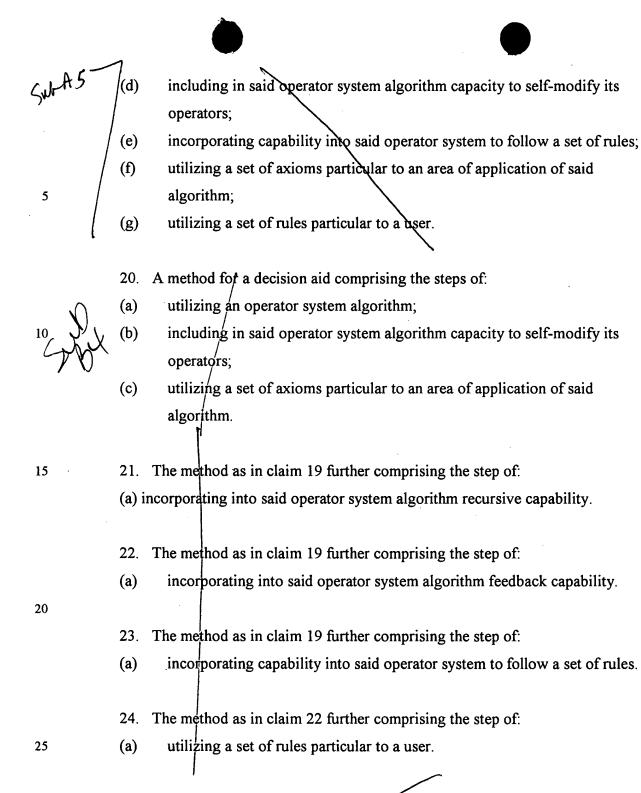
18. A method of operating a computer apparatus capable of assisting a user in decision making in respect of a selected domain application, comprising the steps of:

(a) generating data representing a candidate choice from data representing a pool of potential candidate choices utilizing predefined data, axioms, rules, operator algorithm system;

- (b) displaying graphical and alphanumeric output from the generated data;
- (c) evaluating output results;
- (d) readjusting internal parameters or algorithms by the user, as user requires;
- (e) repeating the data generation and data output stages until output data satisfies user.

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- 19. A method for a making decision aid comprising the steps of:
- (a) utilizing an operator system algorithm;
- (b) incorporating into said operator system algorithm recursive capability;
- 30 (c) incorporating into said operator system algorithm feedback capability;



25. A method for making a decision aid comprising the steps of:

(a) utilizing an operator system algorithm;

(b) utilizing an operator vstem algorithm;

(c) incorporating capability into said operator system to follow a set of rules;

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(d) utilizing a set of axioms particular to an area of application of said algorithm;
(e) utilizing a set of rules particular to a user.

The method as in claim 24 further comprising the step of:

- (a) incorporating into said operator system algorithm recursive capability.
- 27. The method as in claim 24 further comprising the step of:
- (a) incorporating into said operator system algorithm feedback capability.

28. The method as in claim 24 further comprising the step of:

(a) including in said operator system algorithm capacity to self-modify its operators.

29. A method for performing multi-term frequency analysis comprising the steps of:

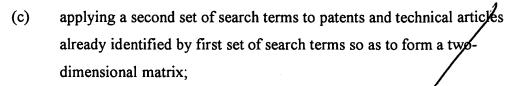
- (a) mapping patent information;
- (b) mapping technology information;
- (c) building a technology landscape;
- (d) building a competitive rights landscape;
- (e) utilizing multiple search results;
- (f) utilizing cross-tabulations of frequencies;
- (g) utilizing inferences from general intellectual asset strategy.
- 25 30. A method for performing multi-term frequency analysis comprising the steps of:
 - (a) applying an identify select-raw data operator in order to select patents;
 - (b) applying a define-terms operator to applied to output from said identify/select-raw-data operator;
- 30 (c) applying an interrelate selected-data operator to output from said defineterms operator;

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- (d) applying a score-cells operator to output from interrelate-selected-data operator;
- (e) applying an analyze/score-company-positions operator to the output of the score-cells operator.
- 31. The method as in claim 29 further comprising the step of
- (a) applying an analyze-results-in-terms-of potential-actions operator to the output of an analyze/score-company-positions operator.
- 10 32. The method as in claim 30 further comprising the step of:
 - (a) applying an evaluate-other-considerations-operator to the output of an analyze-results-in-terms-of potential-agtions operator.
 - 33. The method as in claim 31 further comprising the step of:
 - (a) applying a feedback operator to the output of the interrelate-selected-data operator to adjust search terms to be narrower or broader in selecting raw data.
 - 34. The method as in claim 1 further comprising the step of:
 - (a) applying a feedback operator to the output of both the evaluate-other-considerations operator and the evaluate-other-considerations operator to refine results-and-investigate-alternative-actions.
 - 35. A method for analysis for patents and technical literature comprising the steps of:
 - (a) defining a first set of search terms for searching patent text technical literature;
 - (b) applying said search terms to find patents and technical articles by identification number and year of issue, for patents, and year of publication for technical articles;



- (d) defining various sub-scores and scores and sub-indices and indices for said matrix;
- (e) calculating various sub-scores and scores and sub-indices and indices for said matrix;
- (f) utilizing at least one of said scores or indices for comparison of different assignees.

36. The method as in claim 34 further comprising the steps of:

- (a) defining hits as the number of cells in which a patent appears;
- (b) defining weighted hits as the sum, over the cells, of the quantity: the number of patents in a pell times the weight assigned to that cell;
- defining weighted action as the sum, over a search term axis, of the number of search terms rows, or columns, in which a patent appears, where the number of patents appearing in said row, or said column, has been multiplied by a weighting factor for that search term row, or column.

37. The method as in claim 34 further comprising the steps of:

- (a) defining dominance as a measure of the percentage of patents, overall, assigned to the top 10% of assignees;
- (b) defining dominance as a measure of the percentage of recent patents, in the last two years, assigned to the top 10% of assignees;.
- (c) defining innovation as a measure of recent patent activity for issued and applied patents in a cell;
- (d) defining issued innovation factor as a measure of recent patent activity for issued patents in a cell;
- (e) defining applied innovation factor as a measure of recent patent activity for applied patents in a cell;

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- (f) defining predictive innovation as the difference between applied and issued innovation;
- (g) defining innovation factor -1 as: Innovation Factor 1 = (A / ([B + C] / 2));
- (h) defining innovation factor -4 as: Innov. Fct. $4 = (1/21)\{6(A-B)/B + 5(B-C)/C + 4(C-D)/D + 3(D-E)/E + 2(E-F)/F+1(F-G)/G\}$.
- 38. The method as in claim 35 further comprising the steps of:
- (a) defining average dominance (AvDom) as:

 AvDom = ½ (dominance quartile + recent dominance quartile);
- (b) defining average innovation (AvInn) as:

 AvInn = ½ (issued innovation quartile + applied innovation quartile);
- (c) PredInn is defined as a predictive innovation quartile, for a calculated predictive innovation.
- 39. The method as in claim 36 further comprising the steps of:
- (a) defining cell selection index (CSI) as:

 CSI = (AvDom) (Av Inn) (PredInn);
- (b) defining assignee composite score (ACS) as:

ACS = H1 • CSI
where the H1 factor is multiplied by the Cell Selection Index, CSI, and
where:

H1 = (hits in field/patents in field) • patents in cell + (recent hits in field/recent patents in field) • recent patents in cell.

40. The method as in claim 37 further comprising the steps of:

(a) defining assignee field index (AFI) as:

AFI = H1• PerCentAHR• Aver.,

where:

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H1 = ½ [(An Assignee's Hits / An Assignee's Patents) + (An Assignee's Recent Hits / An Assignee's Recent Patents)],

where:

PerCentAHP = Percentage of Cells where the Assignee Holds at least one Patent = (Number of Cells where an Assignee Holds at least one Patent) / (Total Number of Cells in the Technology Field),

and where:

Aver. = Average (ACI x CSI) across the Technology Field
= (Sum of each (ACI for the given Assignee in each cell in the
Technology Field x CSI of the respective cell)) / (Total Number of Cells
in the Technology Field);

(b) defining standardized assignee field index (sAFI) as: sAFI =AFI • Standardizing Factor

where:

Standardizing Factor = 100 / Max(AFI).

41. The method as in claim 38 further comprising the steps of:

(a) defining assignee cell index (ACI) as:

ACI = $\frac{1}{2}$ {AvPCPinCell +AvPCRPinCell} • [(ACIsI + 100) + (ACAppI + 100)]/ 200 • 1000,

where:

AvPCPinCell = Percentage of Patents in a Cell held by an Assignee,

AvPCRPinCell = Percentage of Recent Patents in a Cell held by an

Assignee),

and where:

Percentage of Patents in a Cell held by an Assignee = (An Assignee's

Patents in a Cell / Total Patents in a Cell),

Percentage of Recent Patents in a Cell held by an Assignee = (An

Assignee's Recent Patents in a Cell / Total Recent Patents in a Cell),

and where:

ACIsI = Assignee Cell Issued Innovation,

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ACAppI = Assignee Cell Applied Innovation, where:

Assignee Cell Issued Innovation = ACIsI = (1/21){ [A-B]/B • 6 + [B-C]/C • 5 + [C-D]/D • 4 + [D-E]/E • 3 + [E-F]/F • 2 + [F-G]/G • 1}

where:

A = the number of patents issued within one year of the last patent issued in the data set; B = the number of patents issued more than one year but less than two years prior to the issuing of last patent in the data set; C = the number of patents issued more than two years but less than three years prior to the issuing of last patent in the data set; D = the number of patents issued more than three years but less than four years prior to the issuing of last patent in the data set; E = the number of patents issued more than four years but less than five years prior to the issuing of last patent in the data set; E = the number of patents issued more than six years prior to the issuing of last patent in the data set; E = the number of patents issued more than six years but less than seven years prior to the issuing of last patent in the data set; E = the number of patents issued more than six years but less than seven years prior to the issuing of last patent in the data set;

where:

Assignee Cell Applied Innovation = ACAppI = (1/21){ [A-B]/B • 6 + [B-C]/C • 5 + [C-D]/D • 4 + [D-E]/E • 3 + [E-F]/F • 2 + [F-G]/G • 1}, where:

A = the number of patents applied within one year of the last patent issued in the data set; B = the number of patents applied more than one year but less than two years prior to the issuing of last patent in the data issuing set; C = the number of patents applied more than two years but less than three years prior to the issuing of last patent in the data set; D = the number of patents issued applied more than three years but less than four years prior to the issuing of last patent in the data set; E = the number of patents applied more than four years but less than five years prior to the issuing of last patent in the data set; E = the number of patents applied more than five years but less than six years prior to the issuing of last patent in the data

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set; G = the number of patents applied more than six years but less than seven years prior to the issuing of last patent in the data set;

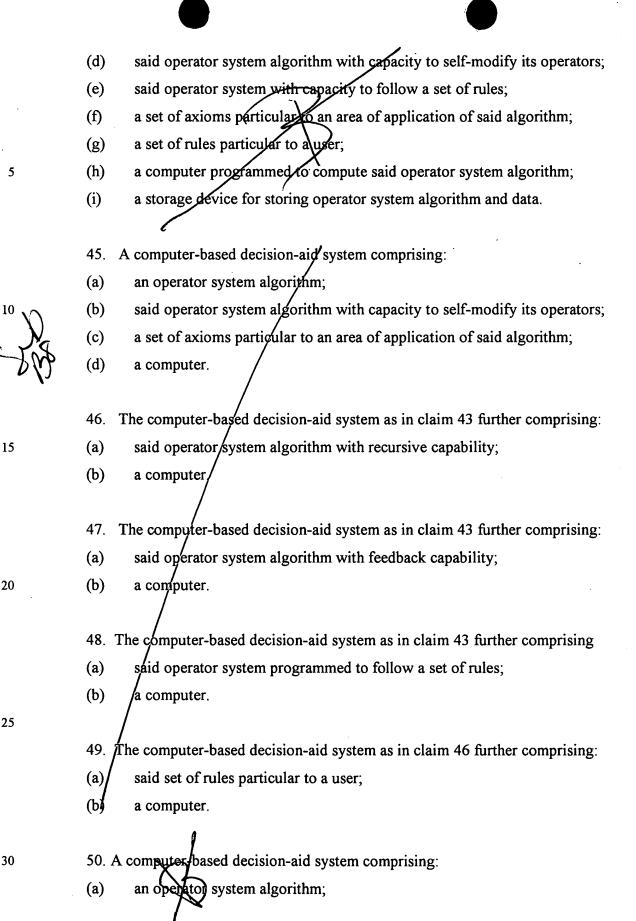
(b) defining standardized assignee cell index (sACI) as:

sACI = ACI • Standardizing Factor

where:

Standardizing Factor = 100 / Max (ACI).

- 42. The method as in claim 39 further comprising the steps of:
- (a) calculating hits, weighted hits, weighted action;
- (b) calculating investment, dominance, recent dominance, issued innovation factor, applied innovation factor, innovation factor -1, innovation factor-4;
 - (c) calculating average dominance, average innovation;
 - (d) calculating cell selection index, assignee composite score;
 - (e) calculating assignee field index, standardized assignee field index;
- (f) calculating assignee cell index and standardized assignee cell index;
- (g) utilizing at least one of said scores or indices for comparison of different assignees.
- 43. The method as in claims 35 or 36 or 37 or 38 or 39 further comprising:
- designating a cluster wherein said cluster is a group of cells are related by having one or more of same patents appearing in each of said cluster's cells;
- (b) specifying a required, by the user, level of said one or more number of patents in said cluster's cells, in order to define said cluster;
- (c) determining a cluster by the arbitrary designation of cells by a user of said designated cells as belonging to a cluster.
 - 44. A computer-based a decision-aid system, comprising:
 - (a) an operator system algorithm;
- 30 (b) said operator system algorithm with recursive capability;
 - (c) said operator system algorithm with feedback capability;



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said operator system with capability to be programmed to follow a set of (b) axioms; (c) said operator system with capability to be programmed to follow a set of rules; a set of axioms particular to an area of application of said/algorithm; (d) (e) a set of rules particular to a user; (f) a computer. 51. The computer-based decision-aid system as in claim 48 further comprising: (a) said operator system algorithm with recursive capability; (b) a computer. 52. The computer-based decision aid system as in claim 49 further comprising: (a) said operator system algorithm with feedback capability; (b) a computer. 53. The computer-based decision aid system as in claim 50 further comprising: said operator system algorithm with capacity to self-modify its operators; (a) (b) a computer. 54. A computer-based multi-term frequency analysis system comprising: (a) mapped patent information; mapped technology literature information; (b) a built technology landscape; (c) (d) a built competitive rights landscape; (e) multiple search results; (f) cross-tabulations of frequencies; (g) inferences from general intellectual asset strategy;

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55. A computer-based multi-term frequency analysis system comprising:

a computer.

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(a) an identify/select-raw-data operator which can select patents;(b) a define-terms operator; wherein said operator is applied to output from

said identify/select-raw-data operator;

- (c) an interrelate-selected-data operator; wherein said operator is applied to output from said define-terms operator;
- (d) a score-cells operator; wherein said operator is applied to the output from said interrelate-selected-data operator;
- (e) an analyze/score-company-positions operator; wherein said operator is applied to the output of the score-cells operator;
- 10 (f) a computer.
 - 56. The system as in claim 53 further comprising:
 - (a) an analyze-results-in-terms-of potential-actions operator; wherein said operator is applied to the output of an analyze/score-company-positions operator;
 - (b) a computer.
 - 57. The system as in claim 54 farther comprising:
 - (a) an evaluate-other-considerations-operator; wherein said operator is applied to the output of an analyze-results-in-terms-of potential-actions operator;
 - (b) a computer.
 - 58. The system as in claim 55 further comprising:
 - (a) a first feedback operator; wherein said first operator is applied to the output of the interrelate-selected-data operator to adjust search terms to be narrower or broader in selecting raw data;
 - (b) a computer.
 - 59. The system as in claim 56 further comprising:
- a second feedback operator; wherein said second operator is applied to the output of both the evaluate-other-considerations operator and the

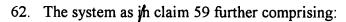
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- evaluate-other-considerations operator so as to refine results-and-investigate-alternative-actions;
- (b) a computer.
- 5 60. A computer-based system for analysis of patents and technical literature comprising:
 - (a) a first set of defined search terms for searching patent text technical literature;
 - (b) patents and technical articles identified by identification number and year of issue, for patents, and year of publication for technical articles; wherein said patents and technical articles found which contained text with defined search terms;
 - a second set of defined search terms; wherein said terms are applied to text of patents and technical articles already identified by first set of search terms so as to form a two-dimensional matrix;
 - (d) various sub-scores and scores and sub-indices and indices calculated from content of said matrix;
 - (e) at least two assignees with at least one of said scores or indices; wherein said scores of each assignee can be compared;
 - (f) a computer.
 - 61. The system as in claim 58 further comprising:
 - (a) hits defined as the number of cells in which a patent appears;
 - (b) weighted hits defined as the sum, over the cells, of the quantity: the number of patents in a cell times the weight assigned to that cell;
 - (c) weighted action defined as the sum, over a search term axis, of the number of search terms rows, or columns, in which a patent appears, where the number of patents appearing in said row, or said column, has been multiplied by a weighting factor for that search term row, or column;
- 30 (d) a computer.

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- dominance defined as a measure of the percentage of patents, overall, and in recent years assigned to the top 10% of assignees;
- (b) recent dominance defined as a measure of the percentage of recent patents, in the last two years, assigned to the top 10% of assignees;.
- (c) innovation is defined as a measure of recent patent activity for issued and applied patents in a cell;
- (d) issued innovation factor is a measure of recent patent activity for issued patents in a cell;
- (e) applied innovation factor is a measure of recent patent activity for applied patents in a cell;
- (f) predictive innovation is the difference between applied and issued innovation;
- Innovation Factor 1 = (A / ([B + C] / 2));

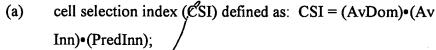
 (h) predictive innovation factor -4 is defined as: Innov. Fct. 4 = (1/21){6(A-B)/B + 5(B-C)/C + 4(C-D)/D + 3(D-E)/E + 2(E-F)/F+1(F-G)/G;
- (h) a computer.
- 63. The system as in claim 60 further comprising:
- (a) average dominance (AvDom) defined as AvDom = ½ (dominance quartile + recent dominance quartile);
- (b) average innovation (AvInn) defined as AvInn = ½ (issued innovation quartile + applied innovation quartile);
- (c) PredInn is defined as a predictive innovation quartile, for a calculated predictive innovation;
- (d) a computer.
- 30 64. The system as in claim 61 further comprising:

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(b)

assignee composite score(ACS) defined as: ACS = H1 • CSI where the H1 factor is multiplied by the Cell Selection Index, CSI, and where:

H1 = (hit's in field/patents in field) • patents in cell +

(recent hits in field/recent patents in field) • recent patents in cell;

(c) a computer.

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The system as in claim 62 further comprising:

(a) assignee field index (AFI) defined as: AFI = H• PerCentAHP • Aver., where:

H = ½ [(An Assignee's Hits / An Assignee's Patents) + (An Assignee's Recent Hits / An Assignee's Recent Patents)],

Where:

PerCentAHP = Percentage of Cells where the Assignee Holds at least one Patent = (Number of Cells where an Assignee Holds at least one Patent) / (Total Number of Cells in the Technology Field),

And where: Aver. = Average (ACI x CSI) across the Technology Field = (Sum of each (ACI for the given Assignee in each cell in the Technology Field x CSI of the respective cell)) / (Total Number of Cells in the Technology Field);

(b) standardized assignee field index(sAFI) defined as: sAFI =AFI •

Standardizing Factor

where: Standardizing Factor = 100 / Max(AFI);

(c) a computer.

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The system as in claim 63 further comprising:

assignee cell index (ACI) defined as: ACI = ½{AvPCPinCell} +AvPCRPinCell} • [(ACIsI + 100) + (ACAppI + 100)]/ 200 • 1000, where:

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AvPCPinCell = Percentage of Patents in a Cell held by an Assignee, AvPCPPinCell = Percentage of Recent Patents in a Cell held by an Assignee),

and where

Percentage of Patents in a Cell held by an Assignee = (An Assignee's Patents in a Cell / Total Patents in a Cell),

Percentage of Recent Patents in a Cell held by an Assignee = (An Assignee's Recent Patents in a Cell / Total Recent Patents in a Cell), and where:

ACIsI = Assignee Cell Issued Innovation,

ACAppI = Assignee Cell Applied Innovation,

where:

Assignee Cell Issued Innovation = ACIsI = (1/21){ [A-B]/B • 6 + [B-C]/C • 5 + [C-D]/D • 4 + [D-E]/E • 3 + [E-F]/F • 2 + [F-G]/G • 1} where:

A = the number of patents issued within one year of the last patent issued in the data set; B = the number of patents issued more than one year but less than two years prior to the issuing of last patent in the data set; C = the number of patents issued more than two years but less than three years prior to the issuing of last patent in the data set; D = the number of patents issued more than three years but less than four years prior to the issuing of last patent in the data set; E = the number of patents issued more than four years but less than five years prior to the issuing of last patent in the data set; F = the number of patents issued more than five years but less than six years prior to the issuing of last patent in the data set; F = the number of patents issued more than six years but less than seven years prior to the issuing of last patent in the data set;

where:

Assignee Cell Applied Innovation = $ACAppI = (1/21)\{ [A B]/B \cdot 6 + [B-C]/C \cdot 5 + [C-D]/D \cdot 4 + [D-E]/E \cdot 3 + [E-F]/F \cdot 2 + [F-G]/G \cdot 1 \},$ where:

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A \neq the number of patents applied within one year of the last patent issued in the data set; B = the number of patents applied more than one year but less than two years prior to the issuing of last patent in the data issuing set; C = the number of patents applied more than two years but less than three years prior to the issuing of last patent in the data set; D = the number of patents issued applied more than three years but less than four years prior to the issuing of last patent in the data set; E = the number of patents applied more than four years but less than five years prior to the issuing of last patent in the data set; F = the number of patents applied more than five years but less than six years prior to the issuing of last patent in the data set; G = the number of patents applied more than six years but less than seven years prior to the issuing of last patent in the data set;

- (b) standardized assignee cell index (sACI) defined as: sACI = ACI • Standardizing Factor where: Standardizing Factor = 100 / Max (ACI);
- (c) a computer.
- 67. The system as in claim 64 further comprising:
- (a) calculating hits, weighted hits, weighted action;
- (b) calculating investment, dominance, recent dominance, issued innovation factor, applied innovation factor, predictive innovation factor -1, innovation factor-4;
- (c) calculating average dominance, average innovation;
- (d) calculating cell selection index, assignee composite score;
- (e) calculating assignee field index, standardized assignee field index;
- (f) calculating assignee cell index and standardized assignee cell index;
- (g) utilizing at least one of said scores or indices for comparison of different assignees;
- (h) a computer.



68; The system as in claim 60 or 61 or 62 or 63 or 64 further comprising::

- (a) designating a cluster wherein said cluster is a group of cells are related by having one or more of same patents appearing in each of said cluster's cells;
- (b) specifying a required, by the user, level of said one or more number of patents in said cluster's cells, in order to define said cluster;
- (c) determining a cluster by the arbitrary designation of cells by a user of said designated cells as belonging to a cluster.

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67. The system as in claim 59 further comprising:

- (a) a threadword; wherein said threadword acts to narrow a top-down search wherein a large number of initial data records are identifies; whereby a reduction in altitude is obtained.
- (b) a second iteration wherein a more restrictive threadword is utilized; wherein the number of relevant data records is reduced; whereby a further reduction in altitude is obtained.
- (c) further iteration, as user specifies, utilizing more restrictive threadwords to further reduce the number of relevant data records; whereby a greater reduction in altitude is obtained.

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68. The system as in claim 56 further comprising:

- a) a threadword; wherein said threadword acts to narrow a top-down search wherein a large number of initial data records are identifies; whereby a reduction in altitude is obtained.
- (b) a second iteration wherein a more restrictive threadword is utilized; wherein the number of relevant data records is reduced; whereby a further reduction in altitude is obtained.
- (c) further iteration, as user specifies, utilizing more restrictive threadwords to further reduce the number of relevant data records; whereby a greater reduction in altitude is obtained.

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The method as in claim 34 further comprising the steps of:

- utilizing a threadword, wherein said threadword acts to narrow a top-down search wherein a large number of initial data records are identifies; whereby a reduction in altitude is obtained;
- (b) utilizing a second iteration wherein a more restrictive threadword is utilized; wherein the number of relevant data records is reduced; whereby a further reduction in altitude is obtained.
- (c) iterating further, as user specifies, utilizing more restrictive threadwords to further reduce the number of relevant data records; whereby a greater reduction in altitude is obtained.

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20. The apparatus as in claim 10 further comprising:

- a threadword; wherein said threadword acts to narrow a top-down search a) wherein a large number of initial data records are identifies; whereby a reduction in altitude is obtained.
- (b) a second iteration wherein a more restrictive threadword is utilized; wherein the number of relevant data records is reduced; whereby a further reduction in altitude is obtained.
- further iteration, as user specifies, utilizing more restrictive threadwords to (c) further reduce the number of relevant data records; whereby a greater reduction in altitude is obtained.

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